

Key Question One: What should content literacy classrooms look like?

Literacy for All

Given high-quality instruction, all students tackle cognitively complex tasks by building knowledge through daily interaction with rich text, marshalling evidence to support an idea, creating unique and purposeful writing, and building a dynamic vocabulary to become skilled in each content area.

-Miah Daughtery, ELA Coordinator, TDOE



ELA Literacy Standards

What do the ELA Standards say about literacy?

"Literacy is a multi-faceted, complex relationship of interrelated skills. The ultimate goal of literacy instruction is for students to become proficient readers and writers." p. 4

"As human beings, we have the right to literacy (UNESCO, 2005). Educators have the responsibility to provide students with the tools to become active, literate members of our society." p. 5

"The committee of Tennessee teachers, administrators, and higher education faculty who wrote the standards maintained an intentional focus on the language of the four strands. Following the mantra of "read about it, talk about it, write about it"-the committee view reading and writing as reciprocal skills; therefore, the role of texts and routine writing permeates all of the standards. Students should read high quality texts, discuss their interpretation and analysis, and write about their learning." p.2



What should I see?

Read About It

Think About It

Talk About It

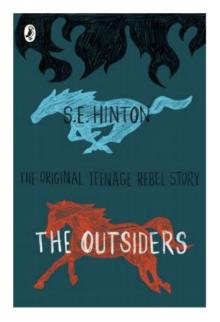
Write About It

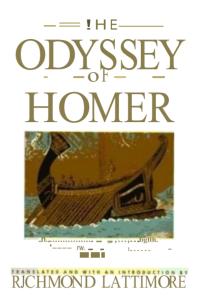
Students spend a majority of time immersed in quality texts and tasks.

- •Students experience read alouds, think alouds, and interactive readings.
- •Students do heavy lifting when processing texts.
- Discussion with student at center of thinking.
- •Students synthesize thinking through discussion.
- Students
 express new
 learning
 through
 writing.
- •The lesson attends to language within the expression activities (not in isolation



Pupose for the Text





What are different reasons for using these texts for instruction?



Think about it and Talk About it

We are going to watch a video of an ELA lesson. As you watch this video, think about these questions.

Think About It

- What teacher moves stretch students thinking?
- How does the discussion engage students to think?

Talk About It

- How do the conversations about text build students' learning?
- What evidence do you see of new learning?



Think About It and Talk About It



- What teacher moves stretch students thinking?
- How does the discussion engage students to think?

Talk About It

- How do the conversations about text build students' learning?
- What evidence do you see of new learning?



Barriers to Bridges

What are the barriers to these practices?

How do we bridge those barriers?

.Education

Literacy in Social Studies Standards

Embedded within the Tennessee Social Studies standards, there are **194** various primary sources found in our standards that are labeled either "to read" or "to consider".

There are also **101** standards that students could potentially be asked to write on for part I of the TCAP (TN Ready and EOC) assessment.

These are the documents and standards that that teachers should be using to allow students ample opportunities to **Think**, **Read**, and **Write** like Historians.



Social Studies Standards 6-12

What should I see in social studies?

Read About It

Think
About It

Talk About It

Write About It

Students spend a majority of time immersed in quality texts and tasks.

Primary Sources

- Students
 experience read
 alouds, think
 alouds, and
 interactive
 readings.
- •Students do heavy lifting when processing texts.
- Discussion with student at center of thinking.
- •Students synthesize thinking through discussion.

Context & Academic Vocabulary

•Students express new learning through writing.

Multiple perspectives on historic issues. Academic language used accurately in writing.



Social Studies Content Literacy Example for ACT Reading Question

Question	Text from Passage
Lines 12-18indicate that at the time of the women's suffrage movement, one of the fundamental assumptions of American politics was that the basic political unit was the: A. individual voter. 8. precinct. C. village or town. O. family.	'In 1910the fight for women's suffrage was more that sixty years old, a national campaign by the National AmericanWoman Suffrage Assocwastwenty years old" {Lines 3-6} "\Vomen's suffrage challenged one of the fundamental assumptions of American politics: that the basic unit of political life was the family, with the father standing at its head representing and protecting his wife and children in the wider world. Togrant suffrage to women would be to break up that fundamental unit \(\) {lines 12-18} "First women's rights meeting at Seneca Falls in 1848\(\) {Line 38} "1895 Massachusetts conducted a referendum whether suffrage should be extended to females# {lines 56-60} "The General Federation of Women's Clubs did not endorse suffrage until 1914." {lines 84-85}

Barriers to Bridges: Literacy in Social Studies

What are the barriers to these practices?

How do we bridge those barriers?

Education

Literacy in Science Standards

- Effective communication within a scientific context requires students to apply literacy skills in reading, vocabulary, speaking and listening, and writing.
- Scientific information is presented in multiple formats from various tones and perspectives.
- Scientifically literate students must process and synthesize information effectively to generate new ideas and solutions while presented in multiple formats from various tones and perspectives.
- Students are able to interpret and analyze information in tables, charts and infographics.



What should I see in science?

Read About It Think About It Talk About It Write About It

Students spend a majority of time immersed in quality texts and tasks.

Variety of authent ic texts

- •Students
 experience read
 alouds, think
 alouds, and
 interactive
 readings.
- •Students do heavy **lif**ting when <u>processin</u> texts.

Representations of Data & Academ ic Vocabulary

- •Discussion with student at center of thinking.
- •Students synthesize thinking through discussion
- •Data analysis included in written express ion of new learning.
- •Written
 expression takes
 on multiple
 formats and uses
 academic
 language.



Science Task

Please use the Science text in your digital resource guide to review the following questions.

Look at how this task expects students to apply the reading and communication practices in the classroom.

- 4. Which of the following statements about meteorite craters on Europa would be most consistent with both scientists' views?
 - E. No meteorites have struck Europa for millions of years.
 - F. Meteorite craters, once formed, are then smoothed or removed by Europa's surface processes.
 - G. Meteorite craters, once formed on Europa, remain unchanged for billions of years.
 - H. Meteorites frequently strike Europa's surface but do not leave any craters.



Passage I

Unmanned spacecraft taking images of Jupiter's moon Europa have found its surface to be very smooth with few meteorite craters. Europa's surface ice shows evidence of being continually resmoothed and reshaped. Cracks, dark bands, and pressure ridges (created when water or

slush is squeezed up between 2 slabs of ice) are commonly seen in images of the surface. Two scientists express their views as to whether the presence of a deep ocean beneath the surface is responsible for Europa's surface features.

Scientist 1

A deep ocean of liquid water exists on Europa. Jupiter's gravitational field produces tides within Europa that can cause heating of the subsurface to a point where liquid water can exist. The numerous cracks and dark bands in the surface ice closely resemble the appearance of thawing ice covering the polar oceans on Earth. Only a substantial amount of circulating liquid water can crack and rotate such large slabs of ice. The few meteorite craters that exist are shallow and have been smoothed by liquid water that oozed up into the crater from the subsurface and then quickly froze.

Jupiter's magnetic field, sweeping past Europa, would interact with the salty, deep ocean and produce a second magnetic field around Europa. The spacecraft has found evidence of this second magnetic field.

Scientist 2

No deep, liquid water ocean exists on Europa. The heat generated by gravitational tides is quickly lost to space because of Europa's small size, as shown by its very low surface temperature (–160°C). Many of the features on Europa's surface resemble features created by flowing glaciers on Earth. Large amounts of liquid water are not required for the creation of these features. If a thin layer of ice below the surface is much warmer than the surface ice, it may be able to flow and cause cracking and movement of the surface ice. Few meteorite craters are observed because of Europa's very thin atmosphere; surface ice continually sublimes (changes from solid to gas) into this atmosphere, quickly eroding and removing any craters that may have formed.

Barriers to Bridges: Literacy in Science

What are the barriers to these practices?

How do we bridge those barriers?



Literacy in the Mathematics Standards

"Reading in mathematics is different from reading literature. Mathematics contains expository text along with precise definitions, theorems, examples, graphs, tables, charts, diagrams, and exercises." (p. 13)

"Students are expected to recognize multiple representations of information, use mathematics in context, and draw conclusions from the information presented." (p. 13)

"Mathematically proficient students write mathematical arguments to support and refute conclusions and cite evidence for these conclusions." (p. 14)



Math Standards

What should I see in math?

Read About It Think About It Talk About It Write About It

Mathematically proficient students have the capacity to **engage fully with mathematics in context** by posing questions, choosing appropriate problem-solving approaches, and <u>justifying solutions</u>.

Mathematically proficient students communicate using precise terminology and multiple representations including graphs, tables, charts, and diagrams.

By describing and contextualizing mathematics, students create arguments and support conclusions.

They evaluate and critique the reasoning of others and analyze and reflect on their own thought processes.



Math ACT example

- 11. A typical high school student consumes 67.5 pounds of sugar per year. As part of a new nutrition plan, each member of a track team plans to lower the sugar he or she consumes by at least 20% for the coming year. Assuming each track member had consumed sugar at the level of a typical high school student and will adhere to this plan for the coming year, what is the maximum number of pounds of sugar to be consumed by each track team member in the coming year?
- A. 14
- B. 44
- C. 48
- O. 54
- E. 66



Reflect and Compare

- Students need frequent writing opportunities to synthesize and process new learning.
- Writing can be informal and formal, but should use academic vocabulary and language as a component of the writing, not as a focus.
- Students need discussion opportunities that require justification, multiple perspectives and solutions, and dialogue.
- Students need multiple solutions to discuss in content area classrooms.





TalkAbout It

About It



Read About It



Think About It



- Increase Text Complexity for rich Lessons in ELA.
- Utilize primary sources for SS and Sci.
- Science and Math need to interpret data from charts and graphs.
- Use explanatory text/scenarios for math.
- Complex and authentic texts drives the ability of thinking in the lesson.
- Thinking needs to be modeled and shared with students.
- Academic language and context should be addressed in 55, Sci, and Math.

Literacy Lens

"Given high-quality instruction, all students tackle cognitively complex tasks by building knowledge through daily interaction with rich text, marshalling evidence to support an idea, creating unique and purposeful writing, and building a dynamic vocabulary to become skilled in each content area."

-Miah Daughtery, ELA Coordinator, TDOE

II

Reflection: Literacy Walk

- Posted all around the room are quotes on literacy from leading experts.
- As a table, read the quotes next to you. Consider how these quotes relate to the conversations of ELA Literacy, Social Studies Literacy, Science Literacy, and Math Literacy.
- Every minute switch stations as a table group.
- Return to your table and have a conversation with others about the quote that resonated with you the most.
- Share out reflections as a group.

